

Figure 1

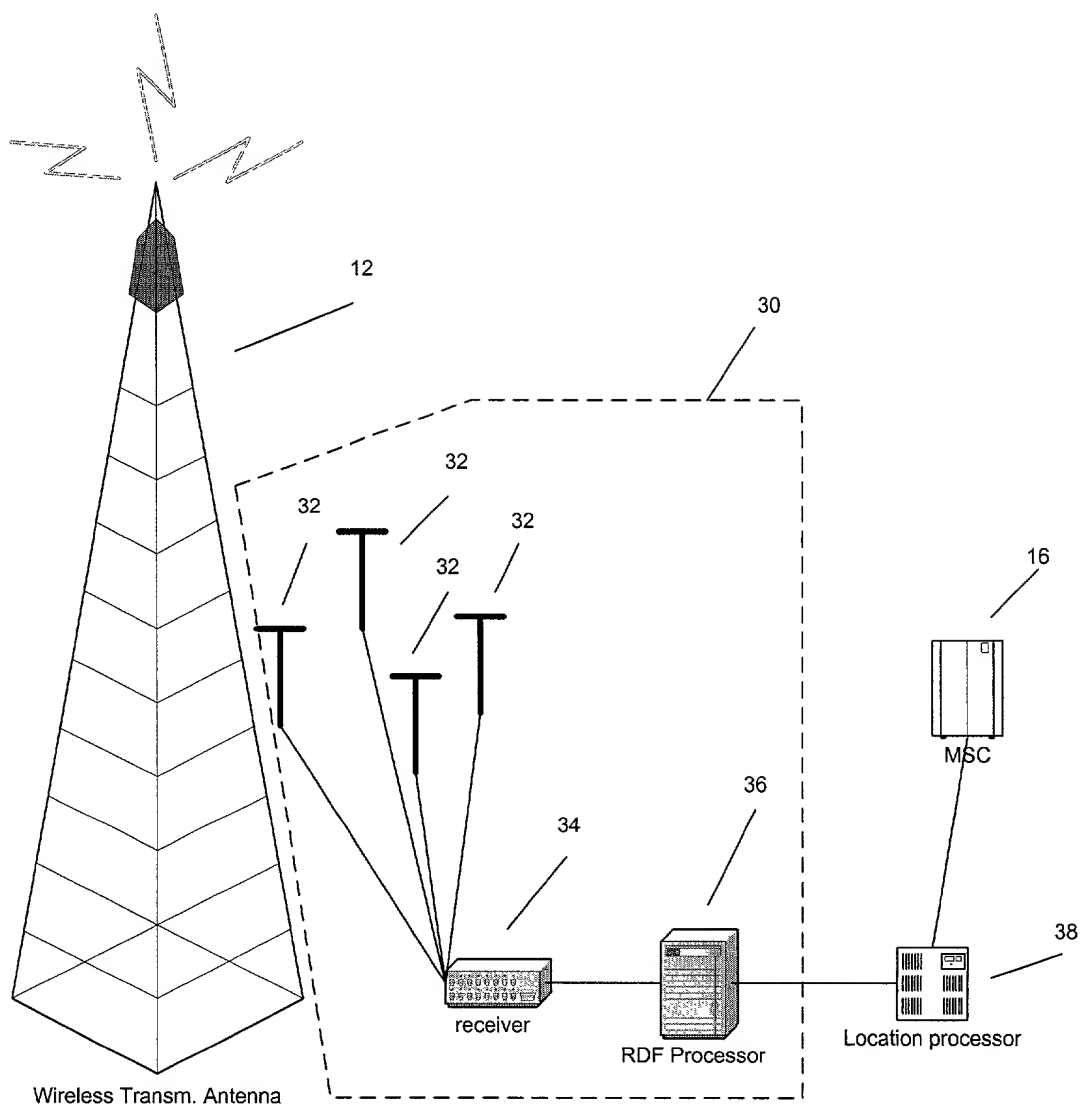


Figure 2

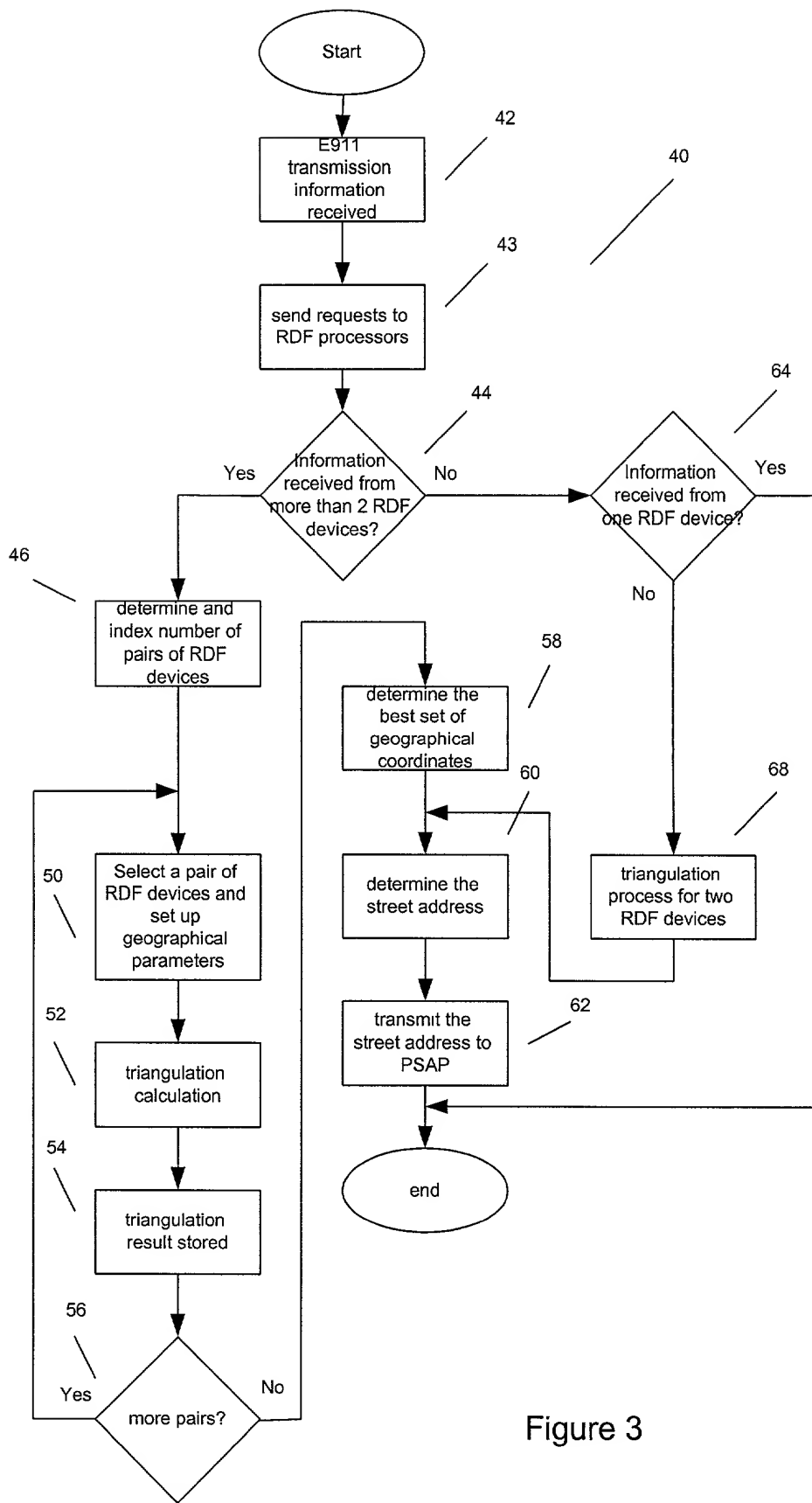


Figure 3

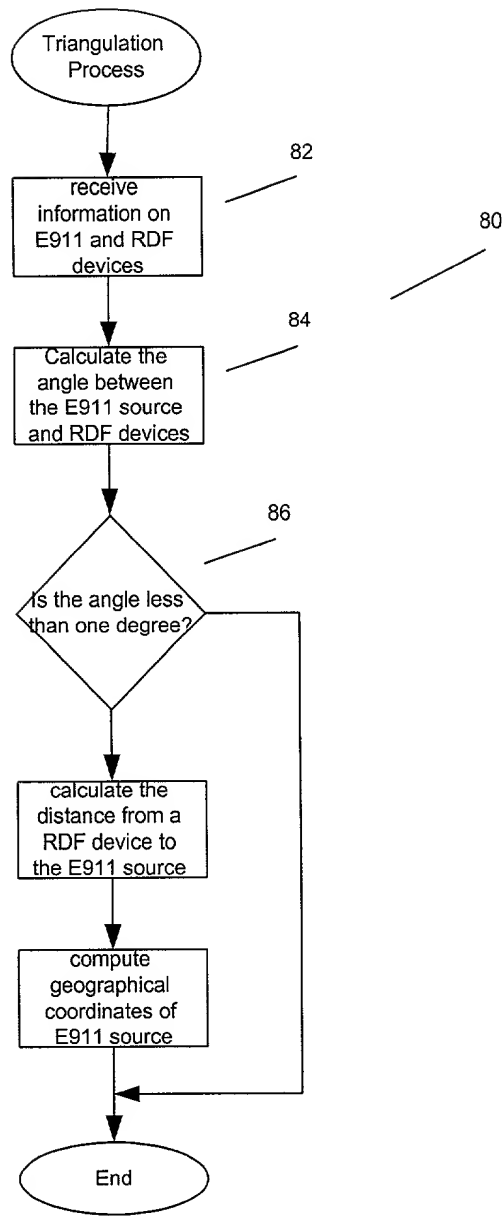
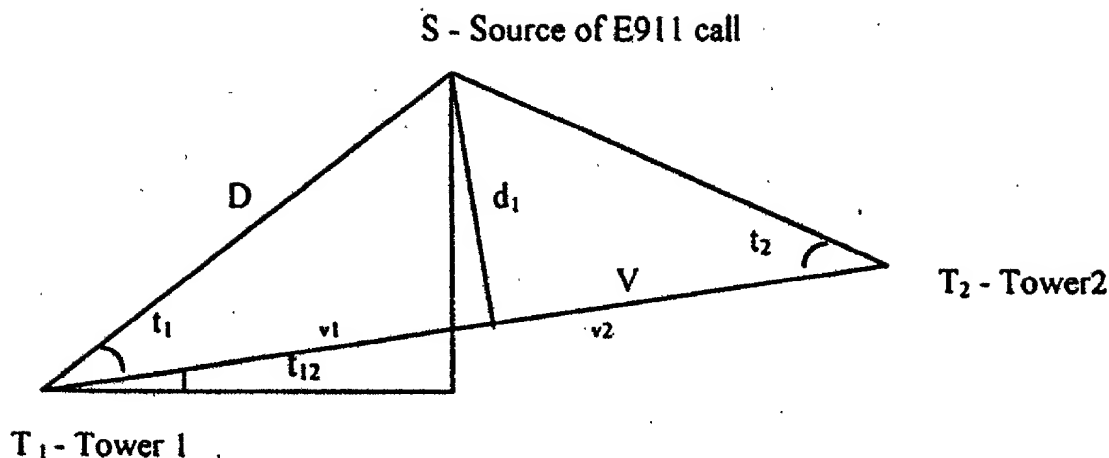


Figure 4



DEFINITIONS

d₁ is the perpendicular distance from Source, S, to the vector, V, connecting T₁ and T₂

D is the derived distance from S to T₁

V is the length of the vector from T₁ to T₂

v₁ is the distance from T₁ to d₁

t₁ is the angle from S to T₂

t₁₂ is the angle at T₁ from the vector, V, to a line representing the Latitude of T₁

t₂ is the angle from S to T₁

V is the sum of v₁ and v₂

$$v_1 = V (\tan t_2) / [(\tan t_1) + (\tan t_2)] \quad \text{Equation 1}$$

$$D = v_1 / \cos t_1 \quad \text{Equation 2}$$

$$\text{Source Latitude} = T_1 \text{ Latitude} + D \sin (t_1 + t_{12}) \quad \text{Equation 3}$$

$$\text{Source Longitude} = T_1 \text{ Longitude} + D \cos (t_1 + t_{12}) \quad \text{Equation 4}$$